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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Guy Nathan

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05/03/2007

NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER

TRAN, HAI V

ART UNIT

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2623

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Office Action Summary</p>	Application No. 09/902,707	Applicant(s) NATHAN ET AL.	
	Examiner Hai Tran	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 1-5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/31/2007 has been entered.

Response to Arguments

Applicant's arguments filed 12/28/2006 have been fully considered but they are not persuasive.

Claim 6, Applicant argues, "Nothing in Martin discusses registering the jukebox of Martin, let alone registering the jukebox "for operation." Further, although the Office Action alleges, "it is inherent that the jukebox device be registered with the central management system in order for the server to successfully communicate with each particular jukebox computer," Applicant respectfully disagrees. The central management system only need have some identifier associated with the jukebox in order to communicate with it. This does not require that the jukebox be registered, and, even if the Examiner continues to disagree with Applicant on this point, this does not inherently disclose that the jukebox be registered "for operation" as claimed by Applicant."

In response, the examiner respectfully disagrees with Applicant's above assertion that "The central management system only need have some identifier associated with the jukebox in order to communicate with it. This does not require that the jukebox be registered", because if the Martin 's Jukeboxes are not registered with the central management, according to Applicant assertion, then any jukeboxes beside Martin's jukeboxes are all able to connect to Martin's central management system for downloading songs free of charge. If that is the case then the Examiner wonders how Martin's central management is able to collect royal fee of these connected jukeboxes without knowing which one of the jukeboxes has or does not has the authorization to obtain the services from the central management? In view of that, it's clear that Martin's jukeboxes are registered with the central management for operation, i.e., playing song from the local library 91 of the jukebox, updating the songs and collecting royalty fee, as disclosed in Col. 3, lines 7-17.

Applicant further argues, "The specification gives a non-exhaustive list of examples as to what Applicant meant by operating settings. Listed are such things as: volume, microphone control, balance control, base, and treble. None of these or the other listed items are remotely the same as "delivery of messages directed to the public" as taught by Vogel. "Delivery of messages" as taught by Vogel is not an operating setting."

In response, the examiner respectfully disagrees with Applicant because "operating setting" is broad enough to read on Vogel' s delivery message (Col. 5, lines 25-43) because Vogel allows an authorized operator to access the jukebox's function/

'operating setting' to create/edit any type messages. Furthermore, it is noted that the features upon which applicant relies (i.e., *volume, microphone control, balance control, base and treble*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 6, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et al. (US 5355302) in view of Frank et al. (US 5341 350), and further in view of Ludwig (US 5521922) and further in view of Hendricks et al. (US 6408437) and further in view of Vogel (US 5117407).

As to claim 6, note the Martin et al. reference that discloses a system for managing a plurality of computer jukeboxes. The claimed "providing a jukebox device including a microprocessor, a memory that stores songs" is met by microprocessor 121A (Martin 5:27) and "songs and displays graphics...are stored locally in the large-volume data storage unit 93" (Martin 5:8-10). The claimed "that may be played on the jukebox device in response to requests by a user" is met by "once a specific song has been selected and queued-up, the processing circuit 121

first identifies the beginning address of the compressed digital data from the song address field 37 of the song record 29 in the queue. From this address, using the bus 124, the circuit 121 reads the compressed digital data out of the storage unit 93, decompressed that data, and sends the decompressed digital data to the audio reproduction circuit 127" (Martin 7:56-64). The claimed "an audio arrangement providing audio" is met by audio reproduction circuit 127 coupled to a speaker system 129 (Martin 5:56-59). The claimed "a communication system for enabling the jukebox device to communicate with a song distribution network" is met by modem 19 and audiovisual distribution network 15 as illustrated in Figure 1 (see Martin). Note, the Martin et al. reference teaches an "[...] operating system that enables [...] operation of the microprocessor, the display, the audio arrangement and the communication system" is met by "and further wherein said jukebox device includes operating software that control operation of said jukebox" wherein "[t]he jukebox 13 also includes a processing circuit 121 which contains a microprocessor 121A, read only memory (ROM) 121B and random access memory (RAM) 121C. As in conventional computer systems, the microprocessor 121A operates in accordance with the software program...processing circuit 121 controls the operation and flow of data into and out of the jukebox 13 through the modem 19 [communication system]...controls a visual display 125 [display]... further controls, via the bus 124, an audio reproduction circuit 127 coupled to a speaker system 129" (Martin 5:26-59). Further note, the Martin et al. reference teaches a "display for displaying images"

(Martin 5:8-25; 6:59-68) and selections keys for interacting with the display (Martin 5:42-59).

Martin does not specifically teach a touch-screen display.

Frank teaches a coin operated jukebox device using data communication network in which Frank suggests, "the input keyboard may also be replaced by a touch screen system" (Frank 4:10-28). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Martin et al. display and selections keys with the Frank touch-screen display for the purpose providing a more intuitive interface for interacting with the jukebox system and to reduce the number of system components, by not requiring the inclusion of separate selection keys.

Martin further does not specifically teach that the disclosed operating system is a multitasking operating system that enables simultaneous operation.

Ludwig teaches a multitasking operating system (Ludwig 4:55-58; 6:15-22; and 18:44-52). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Martin operating system with the Ludwig multitasking operating system in order to manage multiple tasks thereby maximizing the processing power of the microprocessor.

The claimed "providing a server system remote from said jukebox device that can be accessed by said jukebox device through said distribution network" is met by

"the central management system 11 communicates with each computer jukebox 13 via transmission link 15" (Martin 3:26-28).

The claimed "registering said jukebox device for operation through communication between the jukebox device and the server system" is met by "the central management system 11 communicates with each computer jukebox 13 via a transmission link 15" (Martin 3:26-.28) and "the central management system 11 monitors each jukebox 13 to determine the number of times each song has been played" (Martin 3:7-17). Martin's jukeboxes are inherently "registered with the central management for operation", i.e., playing song from the local library 91 of the jukebox, updating the songs and collecting royalty fee, as disclosed in Col. 3, lines 7-17.

The claimed "downloading songs from the server system to the jukebox device and storing the downloaded songs on the jukebox device" is met by the management system 11 downloads to the jukebox songs and graphics (Martin 6:19-58).

The claimed "displaying on the display images of album covers that correspond to songs that are stored on the jukebox device" is met by the display of associated images with songs wherein the images are album covers (Martin 4:51-53; 5:8-25).

The claimed "collecting money through the jukebox device from patrons in exchange for playing selected songs on the jukebox device" is met by "using the display 125, the circuit 121 prompts the user to deposit money into the coin/bill

detector 126...if sufficient moneys have been deposited, the circuit 121 branches to block 171 wherein the circuit 121 updates the play count filed of the selected song's record in the catalog file 95 and money intake data stored in the memory" and queues the song to be played (Martin 7:18-55).

The claimed "wherein the patrons select desired songs by interacting with the jukebox device through the touch-screen display" is met by the Martin in view of Frank, as discussed above, wherein the user uses input device (touch-screen) to select desired songs (Martin 7:18-55).

The claimed "uploading royalty information from the jukebox device to the server system for use in accounting for music rights associated with the selected songs" is met by "particularly, the central management system 11 monitors each jukebox 13 to determine the number of times each song has been played. From these numbers, the central management system 11 can calculate the royalty payments that are due" (Martin 3:7-12). Note, the Martin et al. reference discloses jukebox software (Martin 5:26-33) and updating songs on the jukebox (Martin 6:8-58).

Martin is silent as to upgrading the jukebox software.

Hendricks discloses a reprogrammable terminal. The claimed "sending update data from said server system to said [...] device which is used by said [...] device to remotely update said operating software on said [...] device" is met by the transmitting of update data from the network controller [server] to the device for remote reprogramming (Hendricks 28:14-20). The claimed "upon receipt by said [...]"

device of said update data, modifying said [...] device such that said [...] device will operate in accordance with new operating software updated by use of said update data received from said server system over said distribution network" is met by "upon completion of loading of the new executable 1106 into FLASH ROM 1108, the microprocessor 602 will command that the set top terminal 220 be reset. Resetting the set top terminal 220... causing the new executable program version n+1 1106 to be run" (Hendricks 28:40-45). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Martin's jukebox software and central management system in view of Frank and Ludwig with the Hendricks remote updating of a device from a server for the purpose of providing a convenient way of upgrading functionality of the jukebox without requiring service personnel to visit each physical location and manually upgrade the software. The claimed "sending update data from said server to said jukebox device which is used by said jukebox device to remotely update said operating software on said jukebox device" and "and upon receipt by said jukebox device of said update data, modifying said jukebox device such that said jukebox device will operate in accordance with new operating software updated by use of said update data received from said server over said distribution network" are met by the Martin in view of Frank, Ludwig and Hendricks combination as discussed above.

Martin further teaches route men physically visit the location of each computer jukebox 13 for updating the music catalog (Martin 8:8-30).

Martin does not specifically teach providing a management function.

Vogel teaches a vending machine with synthesized description messages.

The claimed "providing a management function that enables an authorized manager of the jukebox device to locally access and selectively modify operating settings for the jukebox device" is met by control means for providing management functions (Vogel 5:25-43). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Martin route men configuration of a computer jukebox in view of Frank's touch screen in combination with Ludwig and Hendricks with the Vogel management function via control means in order to handle any non-real time operations and maintain the system.

As to claim 9, note the Martin et al. reference teaches the downloading of songs compressed by the server system but does not specifically disclose encoding songs with a code number resident in said jukebox device. Nevertheless, the examine takes Official Notice that it is notoriously well known to encrypt data using a code resident on the receiving device for decryption for the purpose of preventing unauthorized users from accessing the encrypted data. Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Martin server system encoding accordingly for the above stated advantages. The claimed further including encoding songs with a code number resident in said jukebox device before downloading song from the

server system to the jukebox device" and "the songs being encoded by the server system" is met by the combination as discussed above.

2. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et al. (US 5355302) in view of Frank et al. (US 5341 350), and further in view of Ludwig (US 5521922) and further in view of Hendricks et al. (US 6408437) and further in view of Vogel (US 5117407), and further in view of Bacon et al. (US 5440632) and further in view of Beaverton (US 5210854) and further in view of Nilsson et al. (US 5,410,703 of record).

As to claim 7, the claimed "further including, upon receipt of said update data, verifying by said jukebox device if a version number of current software is outdated, and, if said version number is outdated." Note the Martin et al. and Hendricks et al. combination teaches the updating of jukebox software as discussed in the rejection of claim 6.

Martin in view of Frank, Ludwig, Hendricks and Vogel combination does not specifically teach a version comparison.

Bacon discloses a reprogrammable subscriber terminal. The claimed "further including, upon receipt of said update data, verifying by said [...] device if a version number of current software is outdated, and, if said version number is outdated..." is met by "[i]f the code revisions match, that means that the code revision that the parameters transaction is attempting to download is already in the memory space of the control microprocessor 128. Therefore, the program exits. If, on the other hand,

the code revisions do not match then the control processor 128 will..." (Bacon 15:27-68). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin in view of Frank, Ludwig, Hendricks and Vogel to have the system to verify the version of the current software with the new version of the new software, as taught by Bacon so to determine which jukebox device needs to be update. Moreover, to ensure the entire jukeboxes operate with the same software version.

Note that Martin in view of Frank, Ludwig, Hendricks, Vogel and Bacon combination teaches comparing version information as discussed above and performing a function if the version number is outdated. Further note, the Hendricks discloses an embodiment wherein the current program version remains in FLASH ROM while the new program version is installed (Hendricks 28:1-13) and "[i]f a single FLASH ROM does not have enough memory capacity to store both the current program version n 1110 and a new program version, the new program version 1106 can be loaded into a second FLASH ROM" (Hendricks 28:36-39). Also note, Martin discloses a ROM for the software and RAM for a scratch pad (Martin 5:26-32).

Martin in view of Frank, Ludwig, Hendricks, Vogel and Bacon combination does not specifically teach, "performing a back up of the current operating software."

Official Notice is taken that it is notoriously well known in the art to back up current software prior to the installation of a newer version of the software for the purpose of keeping the original working software available for roll-back in the event

the new software fails to install or operate properly. Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin in view of Frank, Ludwig, Hendricks and Bacon combination accordingly for the above stated advantages.

In view of Hendricks recognition that the first FLASH ROM may not have sufficient space to store both versions and the Martin teaching of using a ROM for software and RAM as a scratchpad, the combination as discussed above teaches backing up the current software onto RAM (scratchpad) and installing the new software in ROM (software memory) satisfying the claimed "performing a back up of the current operating software." Further note, Hendricks discloses, generally, switching between the two versions of software (Hendricks 28:40-45).

Martin in view of Frank, Ludwig, Hendricks, Vogel and Bacon combination as discussed does not specifically disclose a startup file.

Beaverton discloses a system for updating program stored in EEPROM by storing new version into new location and maintaining a transfer vector to contain the starting address of the old version or new version (Beaverton 3:10-25). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Martin in view of Frank, Ludwig, Hendricks, Vogel and Bacon combination with the Beaverton's startup file initially pointing at the current software and modifying the startup file to point to the new version of software upon completed loading for the purpose of providing a method for recovering from an installation error of the new version of software.

The claimed "modifying a system startup file for startup with the back up of the current software" is met by the Martin in view of Frank, Ludwig, Hendricks, Vogel, Bacon and Beaverton combination, as discussed above, wherein in order to point to the current program, it is inherent that the start up file be modified to point to the back up of the current software. Note, the Martin in view of Frank, Ludwig, Hendricks, Vogel, Bacon and Beaverton combination discloses "and, if said new version properly [loads], reinitializing the system start up file for startup with the new version" (Beaverton 3:20-25).

Martin in view of Frank, Ludwig, Hendricks, Vogel, Bacon and Beaverton combination fails to specifically teach the method being triggered by the execution of the new version of software.

Nilsson discloses executing the software and if there is a problem rollback to the old version of software (Nilsson 11:15-68; 12:12-37). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Martin in view of Frank, Ludwig, Hendricks, Vogel, Bacon and Beaverton combination teaching modifying a startup file if the new version is properly loaded with the Nilsson's execution error for the purpose of ensuring that the software executes properly prior to the transfer of control from the old version of software to the new version of software.

The claimed "beginning execution of a new version of said software and, if said new version properly operates, reinitializing the system start up file for startup

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with the new version" is met by the Martin in view of Frank, Ludwig, Hendricks, Vogel, Bacon, Beaverton and Nilsson combination as discussed above.

As to claim 8, the claimed "further including, if said verification of said new Version indicates an error, reinitializing said current version of said software" is met by that discussed in the rejection of claim 7. The claimed "and sending an error message to said server system" is met by the transmission of a message to the server upon failure of the installation (Hendricks 27:65-67).

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et al. (US 5355302) in view of Frank et al. (US 5341 350), and further in view of Ludwig (US 5521922) and further in view of Hendricks et al. (US 6408437) and further in view of Vogel (US 5117407), and further in view of Miyashita et al. (US 5467326).

As to claim 10, as discussed above, the combination of Martin's computer jukebox in view of Frank, Ludwig, Hendricks and Vogel clearly teaches the remote Jukeboxes provide a second management function that enables an authorized manager of the jukebox device to access and selectively modify operating settings for the jukebox device through use of an input device, i.e., a keyboard or touch-screen.

The combination of Martin's computer jukebox in view of Frank, Ludwig, Hendricks and Vogel does not specifically disclose the use of a remote control to perform the management function at the remote local site.

Miyashita discloses the use of a remote control to operate function of a jukebox (Fig. 1, el. 21; Col. 4, lines 3-7 and Fig. 11, el. 53; Col. 9, lines 32-37).

Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Martin in view of Frank, Ludwig, Hendricks and Vogel to use a remote control as input device so to provide to user an alternative way to control the jukebox's management function at distance.

Conclusion

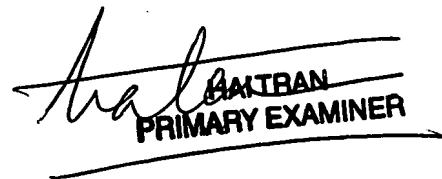
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Tran whose telephone number is (571) 272-7305. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HT:ht
04/27/2007


HAITRAN
PRIMARY EXAMINER